## Important information to know when you are taking:

### Coumadin and Vitamin K

The food you eat can affect how your medicine works. Some foods can change the strength of your medicine, and/or cause serious side effects. It is important to learn about possible drugnutrient interactions for any medicines you take. This information was developed to provide you with information about the interaction between Coumadin, food, and vitamin K.

#### Why was Coumadin prescribed for you?

Some medical conditions can make blood clot too easily and quickly. This could cause serious health problems because clots can block the flow of blood to the brain or heart. Warfarin (Coumadin) is a medication prescribed for people at high risk for forming blood clots because it can prevent harmful blood clots from forming.

#### How does Coumadin work?

Blood clots are formed through a series of chemical reactions in your body. Vitamin K is absolutely essential for the body to make clots. Coumadin works by decreasing the activity of vitamin K, resulting in longer time for a clot to form. Bleeding time measures the time it takes for a clot to form. Individuals at risk for developing blood clots take Coumadin to lengthen usual bleeding time by as much as one-third. Doctors usually measure the bleeding time of individuals on Coumadin every month to make sure it is in the desired range.

#### What can help keep bleeding time in the desired range?

To keep bleeding time stable and within the recommended range, it is important to:

- take the correct dose of Coumadin at the same time every day and
- keep vitamin K intake consistent from day to day.

In other words,

- watch how often you eat vitamin K-containing foods, and
- watch the **portion sizes** of vitamin K-containing foods.

To make it easier to keep your intake of vitamin K consistent,

- Limit foods considered "high" in vitamin K to no more than 1 serving each day.
- Do not eat more than 3 servings per day of foods considered "moderately high" in vitamin K.
- Report any significant changes in diet to your doctor.

#### Food Sources of Vitamin K

Sources high in Vitamin K Limit intake to one serving daily

Swiss chard 1/2 c, cooked
Turnip greens, 1/2 c, cooked
Kale 1/2 c, cooked
Collard greens 1/2 c, cooked
Spinach 1/2 c, cooked
Brussels sprouts 1/2 c, cooked

Sources moderately high in vitamin K Limit intake to three servings daily

Scallion, 1/2c, raw Seaweed, dulse dried, 1/2 c

Chickpeas, dry 1 oz (1/3 c, cooked)

Soybean oil 1 Tbsp

Lentils, dry 1oz, (1/2 c, cooked)

Broccoli, raw/cooked 1/2 c Green tomato, raw 1

Soybeans, dry 1 oz, (1/2 c, cooked)

Cabbage, green,

raw/shredded 1/2 c

#### What else should you know about Coumadin?

- Alcohol intake greater than 3 drinks daily can increase the effect of Coumadin. As long as alcohol intake does not exceed 3 drinks daily, clotting times should not be affected. This amount of alcohol is present in 12 ounces of table wine or 3, 12 ounce beers.
- Herbal supplements can affect bleeding time. For example, Coenzyme Q10 is an herbal supplement whose chemical structure is similar to vitamin K, so it has the potential to affect bleeding time. Coenzyme Q10 should never be taken by anyone taking Coumadin. Wheat grass is an herbal product that is very high in vitamin K and should be avoided by those taking Coumadin. Herbal teas made with tonka beans, melilot (sweet clover), or sweet woodruff also can affect bleeding time and should be avoided.

- Evidence suggests that **vitamin E** has some blood-thinning effects, but research indicates that doses as high as 800 IU vitamin E per day do not significantly affect bleeding time.
- Some **antibiotics** can either decrease vitamin K levels in the body or inhibit the activity of Coumadin. Check with a physician or pharmacist about the need to adjust vitamin K intake when you take antibiotics.
- Olestra is a fat substitute. It is not absorbed and has no calories. It is used to make some fat free snack foods. Fat-soluble vitamins, including vitamin K, consumed at the same time as a food containing olestra will not be completely absorbed. This has raised questions about whether olestra can affect vitamin K status and bleeding time in people who take Coumadin. Without scientific studies to answer this question definitively, those who take Coumadin should either avoid all olestra-containing foods or not eat olestra-containing foods at the same time as foods high in vitamin K

# What are the three important things to remember about Coumadin and vitamin K?

- 1. Coumadin is a very important drug for you; follow the prescription exactly, and keep your follow-up appointments and blood tests.
- 2. Coumadin works on the vitamin K in your body, so it is crucial to keep vitamin K intake consistent. It is also important to avoid herbal products that may affect vitamin K and Coumadin.
- 3. Post the phone numbers of your doctor, pharmacist, and dietitian for ready reference when you have a question or concern about Coumadin and your bleeding time.



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Questions about the Clinical Center? OCCC@cc.nih.gov

The NIH Clinical Center's Drug-Nutrient Interaction Task Force developed this information to help patients learn more about known interactions between certain foods and medications.

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